

WHAT IS CLAIMED IS:

1. Porous polyester particles comprising porous polyester particles having a mean diameter of less than 0.5 micrometers.

2. The particles of claim 1 wherein said particles have a mean diameter range between 0.1 and less than 0.5 micrometers.

3. The particles of claim 1 wherein said particles have a mean diameter range between 0.2 and 0.3 micrometers.

4. The particles of claim 1 wherein the precursor polyester comprises at least one member of the group consisting of maleic, fumaric, itaconic, phenylenediacrylic, citraconic and mesaconic acid.

5. The particles of claim 4 wherein said precursor polyester further comprises sulfonated monomer.

6. The particles of claim 4 wherein said precursor polyester has an acid number of at least 10.

7. The particles of claim 4 wherein said precursor polyester has a molecular weight of 1,000 to 30,000 gm/mole.

8. The particles of claim 1 wherein said particles have an ionic group equivalent weight of between 40 and 2000 grams per mole of ionic unit.

9. The particles of claim 8 wherein said ionic group comprises sulfonate functionality.

10. The particles of claim 1 wherein said particles are dry.

11. The particles of claim 1 wherein said particles are in an aqueous dispersion.
12. The particles of claim 1 wherein said particles are surfactant stabilized.
13. The particles of claim 1 wherein said particles are stabilized by a colloidal inorganic.
14. The particles of claim 1 wherein said particles are stabilized by a protective colloid.
15. The particles of claim 1 wherein said porous particles are a component of a system including at least one particle size system distribution mode of a mean particle diameter greater than 0.5 micrometers.
16. The particles of claim 1 wherein said porous particles have a standard deviation in the mean diameter the value of which is between 0.3 times the mean particle diameter and 3 times the mean particle diameter.
17. The particles of claim 15 wherein said system includes at least one particle size distribution mode of a mean particle diameter between 1 and 10 micrometers.
18. The particles of claim 15 wherein said system includes at least one particle size distribution mode of a mean particle diameter between 1 and 3 micrometers.
19. The particles of claim 1 wherein said porous polyester particles further comprise the copolymerization product of at least one ethylenically unsaturated monomer.

20. The particles of claim 1 wherein said porous polyester particles further comprise the copolymerization product of at least one ethylenically unsaturated monomer selected from the group consisting of styrene, divinylbenzene, divinyl adipate, and cyclohexanedimethanol divinyl ether.

21. An inkjet recording element comprising a support having thereon an ink receiving layer capable of accepting an inkjet image comprising at least one layer comprising porous polyester particles comprising porous polyester particles having a mean diameter of less than 0.5 micrometers.

22. The inkjet recording element of claim 21 wherein said at least one layer further comprises a polymeric binder.

23. The inkjet recording element of claim 22 wherein said particles comprise between 50 and 95% by weight of said at least one layer.

24. The inkjet recording element of claim 22 wherein said particles comprise between 75 and 90% by weight of said at least one layer.

25. The inkjet recording element of claim 22 wherein said polymeric binder comprises poly(vinyl alcohol).

26. The inkjet recording element of claim 22 wherein said polymeric binder comprises sulfonated polyester.

27. The inkjet recording element of claim 22 wherein said polymeric binder comprises gelatin.

28. The inkjet recording element of claim 22 wherein said polymeric binder comprises water dispersible polyurethane.

29. The inkjet recording element of claim 21 wherein said porous particles are a component of a system including at least one particle size system distribution mode of a mean particle diameter greater than 0.5 micrometers.

30. The inkjet recording element of claim 21 wherein said porous particles have a standard deviation in the mean diameter the value of which is between 0.3 times the mean particle diameter and 3 times the mean particle diameter.

31. The inkjet recording element of claim 29 wherein said system includes at least one particle size distribution mode of a mean particle diameter between 1 and 10 micrometers.

32. The inkjet recording element of claim 29 wherein said system includes at least one particle size distribution mode of a mean particle diameter between 1 and 3 micrometers.

33. The inkjet recording element of claim 21 wherein said porous polyester particles further comprise the copolymerization product of at least one ethylenically unsaturated monomer.

34. The inkjet recording element of claim 21 wherein said porous polyester particles further comprise the copolymerization product of at least one ethylenically unsaturated monomer selected from the group consisting of styrene, divinylbenzene, divinyl adipate and cyclohexanedimethanol divinyl ether.

35. The inkjet recording element of claim 21 wherein the precursor polyester comprises at least one member the group consisting of maleic, fumaric, itaconic, phenylenediacrylic, citraconic and mesaconic acid.

36. The inkjet recording element of claim 35 wherein said precursor polyester further comprises sulfonated monomer.

37. The inkjet recording element of claim 35 wherein said precursor polyester has an acid number of at least 10.

38. The inkjet recording element of claim 35 wherein said precursor polyester has a molecular weight of 1,000 to 30,000.

39. The inkjet recording element of claim 21 wherein said element further comprises at least one layer comprising porous polyester particles having a mean diameter of greater than 0.5 micrometers.

40. The inkjet recording element of claim 39 wherein said at least one layer comprising porous polyester particles having a mean diameter of greater than 0.5 micrometers is located below said layer comprising porous particles having a mean diameter of less than 0.5 micrometers.

41. The inkjet recording element of claim 40 wherein said at least one layer comprising porous polyester particles having a mean diameter of greater than 0.5 micrometers further comprises porous polyester particles having a mean diameter of less than 0.5 micrometers.

42. The inkjet recording element of claim 40 wherein said at least one layer comprising porous polyester particles comprising porous polyester particles having a mean diameter of less than 0.5 micrometers further comprises porous polyester particles having a mean diameter of greater than 0.5 micrometers.

43. The inkjet recording element of claim 40 wherein said at least one layer comprising porous polyester particles comprising porous polyester particles having a mean diameter of less than 0.5 micrometers further comprises porous polyester particles having a mean diameter of greater than 0.5 micrometers and wherein said at least one layer comprising porous polyester particles

comprising porous polyester particles having a mean diameter of greater than 0.5 micrometers further comprises porous polyester particles having a mean diameter of less than 0.5 micrometers.

44. The inkjet recording element of claim 40 wherein said layer comprising porous particles having a mean diameter of less than 0.5 micrometers has a thickness of between 1 and 20 micrometers.

45. The inkjet recording element of claim 40 wherein said layer comprising said at least one layer comprising porous polyester particles having a mean diameter of greater than 0.5 micrometers has a thickness of between 5 and 50 micrometers.

46. The ink receiving layers of claim 40 having a combined thickness of between 6 and 65 micrometers.

47. The inkjet recording element of claim 21 wherein said element further comprises absorbed copper phthalocyanine dye and said ink receiving element has a dye density loss in ozone of less than 2 % per day per ppm ozone.

48. The inkjet recording element of claim 21 wherein said element is a single layer and has a surface gloss of greater than or equal to 20 at 60 degrees.

49. The element of Claim 21 wherein said support is paper or a coated paper.

50. The element of Claim 21 wherein said support is selected from the group consisting of poly(ethylene terephthalate), a polyolefin-coated and a polyolefin-laminated paper.

51. The element of Claim 21 wherein said support is transparent.

52. A method of forming an inkjet print comprising providing an inkjet recording element comprising porous polyester particles comprising porous polyester particles having a mean diameter of less than 0.5 micrometers and printing on said inkjet recording element utilizing an inkjet printer.

53. An inkjet recording element comprising a support having thereon an ink receiving layer capable of accepting an inkjet image comprising at least one layer comprising porous polyester particles comprising porous polyester particles having a mean diameter of less than 0.5 micrometers, and at least one layer comprising porous polyester particles having a mean diameter of greater than 0.5 micrometers which is located below said layer comprising porous particles having a mean diameter of less than 0.5 micrometers.

54. An inkjet recording element comprising a support having thereon an ink receiving layer capable of accepting an inkjet image comprising at least one layer comprising porous polyester particles comprising porous polyester particles having a mean diameter of less than 0.5 micrometers, and at least one layer comprising porous polyester particles having a mean diameter of greater than 0.5 micrometers in combination with porous polyester particles having a mean diameter of less than 0.5 micrometers which is located below said layer comprising porous particles having a mean diameter of less than 0.5 micrometers.